

## Remarks

### *Status of Claims*

This paper is submitted in response to the non-final Office action mailed June 28, 2006. Claims 1-21 are pending in the application and stand rejected.

### *Specification*

Paragraphs [0001] and [0052] are voluntarily amended to correct typographical errors. No new matter has been introduced. Paragraph [0001] is amended to claim the benefit of U.S. Provisional Patent Application No. 60/141,765, instead of U.S. Provisional Patent Application No. 60/141,755. The Application Data Sheet submitted on September 29, 2003 properly made reference to U.S. Provisional Patent Application No. 60/141,765. Accordingly, Applicant asserts that a petition under Rule 1.78(a) and a surcharge under Rule 1.17(t) is unnecessary.

The specification is objected to for not referencing every element shown on the drawing figures. Paragraph [0052] is amended to replace “city crystal 38' ” with “city crystal 38' ” and “query” with “iterator.” Accordingly, Applicant respectfully requests withdrawal of this objection.

### *Drawings*

The drawings are objected to as failing to comply with Rule 1.84(p)(5) because they allegedly include “at least one” reference character not mentioned in the description. However, the Office action only cites one example, “reference character 38" in figure 9.” Applicant has amended paragraph [0052] to replace “city crystal 38' ” with “city crystal 38' ”. Accordingly, FIG. 9 satisfies Rule 1.84(p)(5) and Applicant respectfully requests withdrawal of this objection.

The Office action further requests the Applicant to review and correct all sheets of drawings as appropriate. Applicant has reviewed FIGS. 1-18b along with the specification and no further corrections appear necessary.

### *Double Patenting*

Claims 1, 17, and 21 stand rejected under the judicially created doctrine of double patenting over claims 1, 10, and 11 (respectively) of U.S. Patent No. 6,643,648 of Ross et al. To overcome the double patenting rejection, Applicant submits herewith a Terminal Disclaimer.

### *Claim Rejections – 35 U.S.C. §101*

Claims 1, 17, and 21 (and their dependent claims) are rejected under 35 U.S.C. § 101 as allegedly being directed to non-statutory subject matter. The Office action indicates that the result produced by claims 1 and 17 is “a key crystal granting access rights to the database system” and the result produced by claim 21 is “providing a key crystal authorizing use of the data crystal and the query according to the authorized type of data requirement.” The Office action asserts that these results are not considered “tangible” because “granting access” and “authorizing use” are interpreted to indicate decisions being made without tangibly communicating or presenting to the user. In addition, there is no indication that such “granting” or “authorizing” is stored anywhere in memory. Applicant respectfully traverses.

A claim producing a “concrete, tangible and useful” result is patentable subject matter. State St. Bank & Trust Co. v. Signature Fin. Group, 149 F.3d 1368 (Fed. Cir. 1998) (a data processing system for spoke and hub mutual funds was patentable subject matter because it provided a “useful, concrete and tangible result” – a “final share price momentarily fixed for recording and reporting purposes and even accepted and relied upon by regulatory authorities and in subsequent trades”). See also In re Alappat, 33 F.3d 1526 (Fed. Cir. 1994) (data transformed by a machine through a series of mathematical calculations to produce a smooth waveform displayed on a rasterizer monitor was patentable subject matter because it provided a “useful, concrete and tangible result” – a smooth waveform). See also Arrhythmia Research Tech. v. Corazonix Corp., 958 F.2d 1053 (Fed. Cir. 1992) (transformation of electrocardiograph signals from a patient’s heartbeat by a machine through a series of mathematical calculations was patentable subject matter because it provided a “useful, concrete and tangible result” – a condition of a patient’s heart). In determining whether a claim provides a “useful, concrete and tangible result,” the final result achieved by the claims must be considered. “Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility” OG Notices 22 Nov 2005. While the Guidelines do not constitute substantive rulemaking and do not have the force and effect of law, they have been designed to assist USPTO personnel in analyzing claimed subject matter for compliance with substantive law. Id. at 2. The Guidelines indicate that the:

tangible requirement does not necessarily mean that a claim must either be tied to a particular machine or apparatus or must operate to change articles or materials to a different state or

thing. However, the tangible requirement does require that the claim . . . must set forth a practical application . . . to produce a real-world result . . . In other words, the opposite meaning of ‘tangible’ is ‘abstract.’

Id. at 21.

Claim 1 has been amended to refer to “whereby the one or more data crystals, one or more iterators, one or more queries, and key crystal regulate access to the one or more data records.” Regulating access is at least as much of a “useful, concrete and tangible result” as the “final share price” was in State Street. By way of example, an automated data capture and perfection system could obtain data defining a postal address from an envelope and compare the captured address to a reference address stored in the database (*e.g.*, the one or more data records) in order to identify an illegible city name in the captured address. See specification at ¶ [0062]. In addition, the database system of claim 1 can also help keep the data records (*e.g.*, very expensive and valuable data records) secure at each postal site using the database system. See specification at ¶ [0044]. Furthermore, because use of the data records in the database can be contingent on having a key, the data records may effectively be reposed when the key expires. See specification at ¶ [0044]. Therefore, the database system of claim 1 may not only allow an expensive and valuable data set to be securely located at a customer’s site but may also provide rapid data access rates and reduced requirements for data storage memory. See specification at ¶ [0009]. Accordingly, the Applicant submits that claim 1 is directed toward statutory subject matter under section 101.

Claim 17 has been amended to refer to “whereby the plurality of data crystals, iterator, at least one query, and key crystal control access to the at least one data record,” claim 21 has been amended to refer to “whereby the data crystal, iterator, query, and key crystal prevent unauthorized access to the data record,” and claim 22 refers to “accessing data stored in a secure database.” For at least the reasons previously discussed, claims 17, 21, and 22 are directed toward statutory subject matter under section 101. Accordingly, claims 1-25 should be allowed.

***Claim Rejections – 35 U.S.C. §102(e)***

The Office action rejects claims 1-7 and 9-21 as allegedly being anticipated by U.S. Patent No. 5,889,860 (Eller '860) under 35 U.S.C. § 102(e). Applicant respectfully traverses.

Eller '860

In order to better understand the distinctions between the claims in the present application and Eller '860, sections of Eller '860 will be explored.

The following illustrative example provides the overall operation of the music distribution monitoring system of the present invention. A client accesses the music distribution server [using a] browser. From the server home page, the user first selects the option for downloading the Music Viewer program [*e.g.*, the accessing program]. After [downloading and installing the accessing program the] user may then return to the home page and select the music library option to browse the available selections. The user can then scroll through the available selections to identify a score of interest, for example, "Mozart's Sonata Number 1r." In order to verify that this is the piece that the user has in mind, the user may download the score for sampling. The Music Viewer software stores the partially encrypted digital score and will allow the first page of the score (which is transmitted in unencrypted form) to be displayed on the client monitor and played back.

After one or more scores are thus sampled, the user may . . . purchase a copy of or pay a license fee for the score. The user can then [enter identification information and payment information.] If payment is approved, the user will be assigned a decryption password that is indexed to the client's identifying information in a client database held by the server . . .

An unscrupulous user may attempt to redistribute the music . . . electronically [*e.g.*, email it to a friend]. However, having thus attempted to wrongfully redistribute the music, the user will discover that the redistributed information cannot be used because it is encrypted. Such a user may attempt to break the encryption code and may even ultimately surmise that a key has been stored in the client's memory somewhere separate from the music file. In the unlikely event that the user should succeed in redistributing the music together with the password in useable form, the infringing user will have unwittingly left a record of his infringing activity in the form of the personal information that can be derived from the client/transaction encoded password.

Eller '860, col. 8, line 45 – col. 9, line 36.

### Claim 1

Claim 1 refers to “one or more queries, each query predefined to receive an indication of an authorized type of data requirement, to request at least one data record from the iterator, and to select from among the returned at least one data record a requested data record satisfying the data requirement.” Simply put, Eller '860 does not disclose the “one or more queries” of claim 1 for several reasons. By way of example, in the present case:

database customer applications call queries belonging to the predefined query types to instruct the iterator to access the data records in the database. The database customer can be given access to select predefined query types, and the calling of the queries can be done by the customer application itself as part of standard operations. Database customer applications are only allowed to interact with queries. They cannot interact directly with the iterators. This prevents a customer from using the iterators to extract the entire contents of the crystalized database.

Specification at paragraph [0011]. Thus, the “one or more queries” refers to a code segment or an executable set of instructions that has its own logic or intelligence. For example, the:

predefined query types are typically designed by the database designer to answer specific questions or to solve specific types of problems the database designer anticipates the customer to have. The complexity of the method used by the predefined query types to answer a particular question depends on the complexity of the question being asked or problem being solved. For example, a query can have multiple procedures for procuring information, and the actual procedures implemented can be responsive to the exact information needed.

Specification at paragraph [0011]. By way of another example, “one query **34a** may direct multiple iterators **36a** and **36b** to obtain the desired information,” specification at paragraph [0050], and “additionally, a query **34b** can incorporate one or more other predefined queries **34a** by reference.” Specification at paragraph [0051].

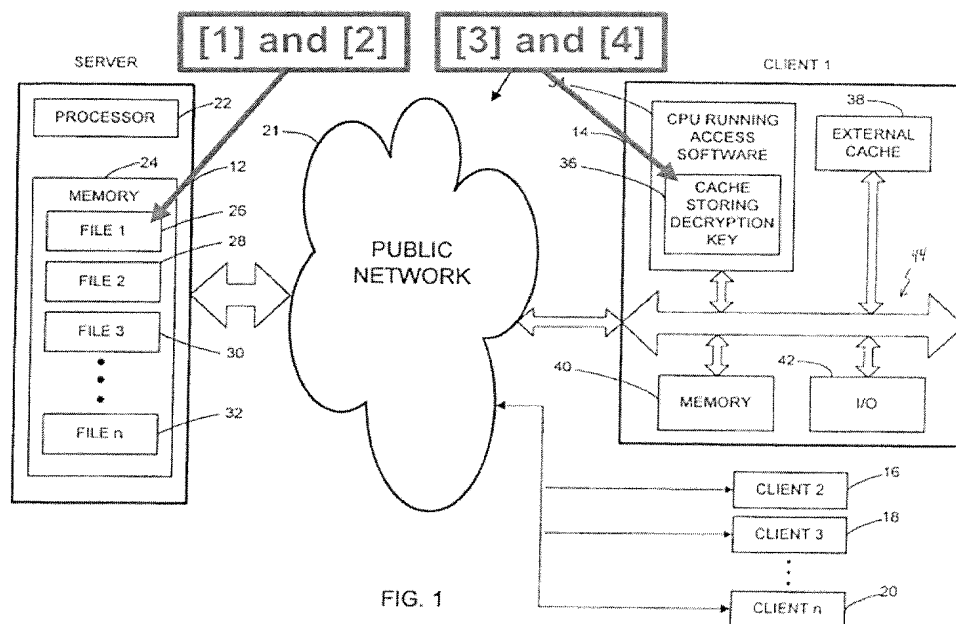
### *Eller '860 Does Not Disclose a Query Predefined to Receive an Indication of an Authorized Type of Data Requirement*

First, claim 1 refers to “each query predefined to receive an indication of an authorized type of data requirement.” The Office action alleges that ‘query’ is read on ‘request by a client,’ citing col. 2, lines 20-21 of Eller '860. In addition, the Office action

alleges that ‘authorized type of data’ is read on ‘information for a specific client,’ citing col. 2, lines 22-25 of Eller ’860. Read in context, the cited portions of Eller ’860 describe:

a method and corresponding system . . . for monitoring distribution of information accessible over a public network on a client-specific basis. The method includes the steps of: [1] establishing a database of information at a server; [2] encrypting at least a portion of the information using a key-based encryption system; [3] in connection with a request by a client, assigning a client-specific key to the client; and [4] transmitting the key to the client. The client-specific key includes some indicia that can be used to identify the client, thereby allowing for monitoring of information use on a client-specific basis.

Eller ’860, col. 2, lines 14-25.



Applicant has annotated the cited portions of Eller ’860 and annotated Fig. 1 of Eller ’860 to illustrate items [1], [2], [3], and [4]. With reference to Fig. 1 of Eller ’860, items [1] and [2] are located on server 12. Items [3] and [4] (e.g., the key) are located on client 14. The “server 12 is operative for receiving access requests from clients 14-20 [and] assigning decryption keys or passwords.” Eller ’860, col. 4, lines 32-34. Apparently, the key is assigned after a music file is purchased, Eller ’860, col. 5, lines 3-10, and includes some identifying information for client identification (e.g., personal or financial data, or address information for the clients’ computer). Eller ’860, col. 2, lines 30-35. Accordingly, in response to a request by a client to purchase a music file, a client specific key (including identifying information) is assigned and transmitted to the client.

This is not the same as “each query predefined to receive an indication of an authorized type of data requirement” for several reasons. (quoting claim 1).

First, the alleged ‘request by a client’ (*e.g.*, the ‘query’ of claim 1 as the Office action alleges) in Eller ’860 is to purchase a music file. Eller ’860 does not indicate that the request by a client to purchase a music file is predefined. In addition, even assuming *arguendo* that the alleged ‘request by a client’ in Eller ’860 was predefined, it is not predefined to receive an indication of an ‘authorized type of data requirement.’ If the ‘query’ of claim 1 is defined as a ‘request by a client,’ then claim 1 requires the ‘request by a client’ to be ‘predefined to receive an indication of an authorized type of data requirement.’ The Office action alleges that the ‘authorized type of data’ is read on ‘information for a specific client.’ Essentially, the Office action is arguing that the ‘request by a client’ in Eller ’860 is predefined to receive an indication of an ‘information for a specific client’ requirement. However, in Eller ’860, the ‘request by the client’ is to purchase a music file, not to receive the client’s own information (*e.g.*, personal or financial data or address information). Presumably, the client would already know this information and would not need to request it from the server. Accordingly, Eller ’860 does not anticipate the “each query predefined to receive an indication of an authorized type of data requirement” portion of claim 1.

*Eller ’860 Does Not Disclose a Query Predefined to  
Request At Least One Data Record from the Iterator*

Claim 1 refers to “each query predefined . . . to request at least one data record from the iterator.” The Office action alleges that col. 2, lines 20-21 of Eller ’860 anticipates the ‘one or more queries’ portion of the claim by arguing that ‘query’ is read on ‘request by a client.’ In addition, the Office action alleges that col. 3, lines 2-11 of Eller ’860 anticipates this portion of the claim by arguing that ‘one data record’ is read on ‘selected portion of the information.’ Applicant respectfully traverses.

As previously discussed, the Office action argues that ‘query’ is read on ‘request by a client.’ (*e.g.*, a request by a client to purchase a music file). See col. 2, lines 20-21 of Eller ’860. If the ‘query’ of claim 1 is defined as a ‘request by a client,’ then claim 1 requires the ‘request by a client’ to be “predefined . . . to request at least one data record from the iterator.” The Office action argues that ‘iterator’ is read on ‘accessing program’ of Eller ’860 (*e.g.*, the Music Viewer program). See Eller ’860, col. 5, lines 4-6. Applicant does not see where Eller ’860 discloses a ‘request by a client’ predefined to

request at least one data record from the ‘accessing program.’ (e.g., using the accessing program to purchase a music file). Instead, “the Music Viewer software [e.g., accessing program] monitors client messages until it receives (100) an ‘open file’ message indicating that the user desires to print, playback or otherwise use the music.” Eller ’860, col. 6, lines 47-50. Accordingly, Eller ’860 does not anticipate the “each query predefined . . . to request at least one data record from the iterator” portion of claim 1.

*Eller ’860 Does Not Disclose a Query Predefined to  
Select From Among the Returned At Least One Data Record a Requested Data Record  
Satisfying the Data Requirement*

Claim 1 refers to “each query predefined . . . to select from among the returned at least one data record a requested data record satisfying the data requirement.” By way of example:

[o]ne example of [an] automated data capture and perfection system would be to obtain data defining a United States postal address from a postal envelope and then compare the obtained address to a known reference address stored in the crystal database **40** in order to identify an illegible city name in the address. In Figure 12, the data comprising the address is supplied to a customer application that does data record parsing. The parser application **218** divides the data record address into pieces expected to correspond to data fields. The predefined queries **34** are then called to direct iterators **36** to request data from the crystal database **40**. For example, if both a city name and a zip code are distorted in a postal address, and the city appears to begin with the letters “RED,” a predefined query **34** can be called to ask for a list of all U.S. cities that start with the letters “RED.” It could also be defined to ask for cities that appear to start with the letters “RED” or contain the letters “RED.” Once the results are obtained from the crystal database **40**, a predefined query **34** can also be used to verify or determine possibilities for the distorted zip code. If the city name data and zip code data are connected with pointers, one of the query results for the possible city names should match with one of the query results for the zip code. The correct result can then be sent in any of numerous forms of output. Examples of output include a corrected address **222**, routing information for incoming mail **224**, or validated check information **226**. The output can also be structured however the database customer prefers, and may depend on the original source or form of the data.

Specification at paragraph [0062]. The Office action alleges that col. 3, lines 11-14 of Eller ’860 anticipates this portion of claim 1 by arguing that the “client can browse through selection prior to making a purchase decision.” This is not the same as “each query predefined . . . to select from among the returned at least one data record a requested data record satisfying the data requirement” for several reasons.



First, if the ‘query’ of claim 1 is defined as a request by a client to purchase a music file, then claim 1 requires the request by a client to purchase a music file to be “predefined to select from among the returned at least one data record a requested data record satisfying the data requirement” (quoting claim 1). Eller ’860 discloses purchasing one music file, col. 3, lines 66-67, not selecting among multiple purchased music files. Accordingly, the request by a client to purchase a music file would not be “predefined to select from among the returned at least one data record a requested data record satisfying the data requirement.”

In addition, the Office action cites various portions of Eller ’860 that, when read in context, do not anticipate claim 1. For example, the Office action argues that ‘one data record’ is read on ‘selected portion of the information’ (citing col. 3, lines 2-11) in one breath while arguing that ‘the data requirement’ is read on ‘information for a specific client’ (citing col. 2, lines 22-25) in another breath. As previously discussed, col. 3, lines 2-11 generally relate to sampling a score before making a purchasing decision and col. 2, lines 22-25 generally relate to personal or financial data, or address information for the clients’ computer. Essentially, the Office action is arguing that Eller ’860 allegedly discloses a request by a client to purchase a music file that is predefined to select from among the returned at least one sampling of a score a requested sampling of a score satisfying the information for a specific client (*e.g.*, personal or financial data, or address information for the clients’ computer). However, Eller ’860 states that the information for a specific client is used for client identification. Col. 2, lines 29-30. Accordingly, a sampling of a score would not satisfy the information for a specific client because the user will presumably purchase the score based on sampling it (see col. 8, lines 60-67), not the user’s own identifying information. Accordingly, Eller ’860 does not anticipate the “each query predefined . . . to select from among the returned at least one data record a requested data record satisfying the data requirement” portion of claim 1.

*The Iterators of Claim 1 Cannot be the Access Program of Eller ’860*

Claim 1 refers to “one or more iterators, each iterator programmed to access, deobfuscate, and return at least one of the one or more data records in response to a data request.” The Office action argues that the iterator of claim 1 is read on the accessing program of Eller ’860, citing col. 4, lines 46-49. Applicant respectfully traverses.

The accessing program of Eller ’860 (*e.g.*, the Music Viewer program) is used by “a client in accessing music files stored on the server.” Eller ’860, col. 5, lines 4-6. As

shown in Fig. 1 of Eller '860, the client “includes a central processing unit (CPU) 34, an internal cache 36 and/or external cache 38, memory 40 and input/output (I/O) hardware 42, all interconnected via data bus 44.” Eller '860, col. 4, lines 42-45. In operation, “the Music Viewer software monitors client messages until it receives (100) an ‘open file’ message indicating that the user desires to print, playback or otherwise use the music.” Eller '860, col. 6, lines 47-50. Accordingly, the user in Eller '860 appears to have direct access to the accessing program.

However, claim 1 refers to “each query predefined . . . to request at least one data record from the iterator.” Access to the iterators is indirect – via the queries. “If a customer has direct access to the queries 34a and 34b, the data is still secure, but if the customer has direct access to the iterators 36a-36c, the data is not secure.” Specification at ¶ [0051]. Since the user in Eller '860 has direct access to the accessing program, the accessing program cannot be the iterators of claim 1. Accordingly, the accessing program of Eller '860 cannot anticipate the iterators of claim 1.

For at least these reasons, claim 1 is patentable over Eller '860. Accordingly, Applicant respectfully traverses and requests withdrawal of the rejection.

### Claim 2

Claim 2 refers to the “database system of claim 1 further comprising an application to provide the indication of the data requirement to the one or more queries, wherein the application has direct access to the one or more queries but not the one or more iterators, the one or more data crystals, or the one or more data records.” The cited portions of Eller '860 do not anticipate this portion claim 1 for several reasons.

### *The Office Action Fails to Indicate the Application in Eller '860*

First, claim 2 refers to “the database system of claim 1 further comprising an application.” The Office action does not specify the portion of Eller '860 that anticipates this claim element. Accordingly, Applicant respectfully asserts that no prima facie case of anticipation has been made.

*Eller '860 Does Not Disclose an Application Providing the Indication  
of the Data Requirement to One or More Queries*

In addition, claim 2 refers to “an application to provide the indication of the data requirement to the one or more queries.” The Office action alleges that the ‘data requirements’ is read on ‘information for a specific client’ (col. 2, lines 22-25) and ‘query’ is read on ‘request by a client’ to purchase a music file (col. 2, lines 20-21). Essentially, the Office action is arguing that an application provides the indication of ‘information for a specific client’ to the one or more ‘requests by the client’ to purchase a music file. As previously discussed, the ‘information for a specific client’ includes personal or financial data, or address information for the clients’ computer. Eller '860, col. 2, lines 30-35. Therefore, if the client is requesting to purchase a music file, the client would presumably know the client specific information (*e.g.*, personal or financial data) and an application would not need to provide this information to ‘the one or more requests by the client.’ Accordingly, Eller '860 does not anticipate the “an application to provide the indication of the data requirement to the one or more queries” portion of claim 2.

*Eller '860 Does Not Disclose an Application Not having Direct Access to  
the One or More Iterators, Data Crystals, or Data Records*

Further, claim 2 refers to “the database system of claim 1 further comprising an application . . . wherein the application has direct access to the one or more queries but not the one or more iterators, the one or more data crystals, or the one or more data records.” The Office action alleges that Eller '860 anticipates the application not having direct access to one or more iterators by pointing to ‘limited multiple-use authorization’ in col. 2, lines 7-10 and the application not having direct access to one or more data records by pointing to col. 3, lines 11-14.

First, the Office action does indicate where Eller '860 anticipates “the application [having] direct access to the one or more queries” (quoting claim 2). Next, col. 2, lines 7-10 of Eller '860 states that “the invention provides increased marketing flexibility by allowing for limited, multiple-use authorization and pre-purchase sampling of copyrighted works or other confidential subject matter.” Applicant fails to see how this supports a conclusion that “the application [does not have direct access to] the one or more iterators” (quoting claim 2). Further, col. 3, lines 11-14 state that “the client can thereby browse through a selection of scores prior to making a purchasing decision, authorizing

payment and, in response, receiving a decryption key.” Applicant fails to see how this supports a conclusion that “the application [does not have direct access to] the one or more data records.” Because the Office action does not further clarify the arguments, Applicant respectfully asserts that no prima facie case of anticipation has been made.

For at least these reasons, claim 2 is patentable over Eller '860. Furthermore, claim 2 incorporates all of the limitations of claim 1 and is therefore patentable over Eller '860 for at least the reasons discussed *supra*. Accordingly, Applicant respectfully traverses and requests withdrawal of the rejection.

### Claim 3

#### *The Office Action Fails to Indicate the Application in Eller '860*

Claim 3 refers to “the database system of claim 2 wherein the application . . .” The Office action does not specify the portion of Eller '860 that anticipates the application. Accordingly, Applicant respectfully asserts that no prima facie case of anticipation has been made.

#### *Eller '860 Does Not Disclose an Application Selecting Among the One or More Queries Based on the Type of Data Requirement*

Claim 3 refers to “the database system of claim 2 wherein the application selects among the one or more queries based on the type of data requirement.” By way of example:

Queries can call other queries, and they can be predefined to access almost the entire database, depending on the required complexity of the questions the queries will be called to answer. A more complex query can call another query that knows how to do one simple aspect of the complex query's task. Each query can also call as many iterators as necessary to answer that query's task. As an example of a simple query and iterator interchange, as illustrated in Figure 9, a query **34a** could ask a predefined question type, such as: “What is a city name for zip code 98052?” The type of question was predefined, but the actual blank was filled in by the customer application. The blank could also be filled in by a range of zip codes. The query **34a** then directs a first iterator **36b** to look for “98052” in the city state zip data crystal **38'**. The first iterator **36b** locates and supplies a reference or pointer that is then used by a second iterator **36a**, also directed by the original query **34a**, to find the actual data record desired. The second iterator **36a** then locates the data in the city crystal **38''** and supplies the actual name of the city. In a simplified form, the

steps illustrated above involve locating a zip code in one location, finding out where the city name is stored in a different location, and retrieving the city name from that storage location. The specific intricacies of the referencing or pointer structure are illustrated further in Figure 10.

Specification at paragraph [0052]. The Office action points to ‘browse through a selection of scores’ in col. 3, lines 2-14. This is not the same as “the database system of claim 2 wherein the application selects among the one or more queries based on the type of data requirement” for several reasons.

First, as previously discussed, the Office action alleges that ‘data requirement’ is read on ‘information for a specific client’ (col. 2, lines 22-25) and ‘query’ is read on ‘request by a client’ to purchase a music file (col. 2, lines 20-21). Essentially, the Office action alleges that the application selects among the one or more ‘requests by a client’ to purchase a music file based on the type of ‘information for a specific client’ (e.g., personal or financial data or address information). Applicant does not see where Eller ’860 discusses the application selecting among the one or more ‘requests by a client’ to purchase a music file based on the type of ‘information for a specific client.’ Because the Office action does not further clarify the argument, Applicant respectfully asserts that no prima facie case of anticipation has been made.

For at least these reasons, claim 3 is patentable over Eller ’860. Furthermore, claim 3 incorporates all of the limitations of claims 1 and 2 and is therefore patentable over Eller ’860 for at least the reasons discussed *supra*. Accordingly, Applicant respectfully traverses and requests withdrawal of the rejection.

#### Claim 6

##### *The Office Action Fails to Indicate the Iterator Interface in Eller ’860*

Claim 6 refers to “the database system of claim 1, further comprising an iterator interface . . .” By way of example, Fig. 11A of the present application illustrates:

the use of an iterator interface **44a and 44b** to ensure continuing functionality when a new or updated data crystal **38** is provided to a customer. A predefined query **34a-34c** is originally defined to reference a particular version of an iterator **36**, but because the iterator **36** has to correspond directly to the data crystal **38** when a new version of a data crystal **38** is created, a new version of the iterator **36** is also created by the database designer. This is because the iterator is required to understand the current structure of the data in the data crystal **38**. The new version of the iterator **36** is desirable because locations where the old version of the

iterator 36 knew to look for a particular data record may no longer be accurate. The iterator interface 44a and 44b is provided in order to ensure that the predefined query 34a-34c will be correctly interpreted by the new version of the iterator. New versions of the iterator 36 are made compatible with the iterator interface 44a and 44b. A predefined query 34a may request data via an iterator interface 44a for older data crystals 38 and iterators 36, which then translates between the predefined query 34a and the new version of the iterator 36. Essentially, the iterator interface 44a and 44b operates like a mask to make the iterator 36 and data crystal 38 of the current version look like ones of prior versions, for the benefit of items designed to operate with the prior versions. Accordingly, any predefined query 34a-34c will always function correctly. In this manner, even after a predefined query 34a-34c is defined, it can function with multiple successive versions of the data crystal 38 so long as an iterator interface 44a and 44b is supplied to provide a consistent interface among the subsequent versions of the data crystal 38.

Specification at paragraph [0056]. The Office action does not specify the portion of Eller '860 that anticipates the iterator interface. Accordingly, Applicant respectfully asserts that no prima facie case of anticipation has been made.

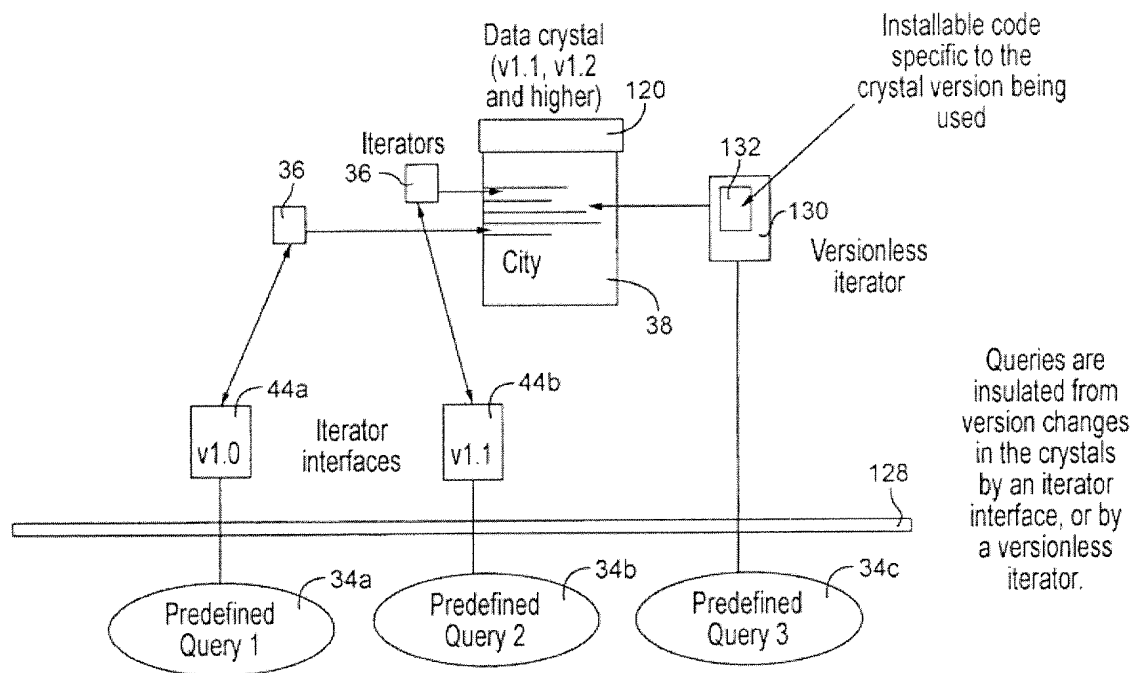


FIG. 11A

FIG. 11A of the Present Application

*Eller '860 Does Not Disclose an Iterator Interface Acting as a Buffer Between the One or More Queries and the Corresponding Iterator*

Claim 6 refers to “the database system of claim 1, further comprising an iterator interface . . . wherein the iterator interface acts as a buffer between the one or more queries and the corresponding iterator.” The Office action alleges that Eller '860 anticipates this claim element by pointing to “col. 2, lines 14-25, where ‘queries’ is read on ‘request by a client;’ and . . . col. 4, lines 32-36, where the ‘accessing program’ serves as a client’s interface (acts as a buffer) to access desired musical scores (queries).” The ‘iterator interface’ and ‘iterator’ are distinct claim elements. The Office action has already alleged that the ‘accessing program’ is the ‘iterator’ of claim 6. The Office action also appears to allege that the ‘accessing program’ is also the ‘iterator interface’ of claim 6. Applicant cannot see why the ‘accessing program’ would act as an interface between a ‘request by a client’ to purchase a score and the ‘corresponding accessing program’ (e.g., itself). Because the Office action presents no arguments to support this assertion, Applicant respectfully asserts that no prima facie case of anticipation has been made.

*Eller '860 Does Not Disclose an Iterator Interface Allowing the Queries to Work With a Different Version of the Specific Iterator and Corresponding Data Crystal*

Claim 6 refers to “the database system of claim 1, further comprising an iterator interface . . . wherein the iterator interface allows the queries to work with a different version of the specific iterator and corresponding data crystal.” The Office action cites col. 2, lines 30-37 in reference to this claim element. Col. 2, lines 30-37 of Eller '860 states that “examples [of identifying information] include: personal or financial data provided by the client; address information for the clients’ computer or web site; account numbers or serial numbers; other information for identifying the computer used by the client; and abbreviated or encoded versions of any of the above. Conveniently, such information can be stored in a separate client database and indexed to the key.” Applicant fails to see how this supports a conclusion that “the iterator interface allows the queries to work with a different version of the specific iterator and corresponding data crystal.” Because the Office action does not further clarify the argument, Applicant respectfully asserts that no prima facie case of anticipation has been made.

For at least these reasons, claim 6 is patentable over Eller '860. Furthermore, claim 6 incorporates all of the limitations of claim 1 and is therefore patentable over Eller '860 for at least the reasons discussed *supra*. Accordingly, Applicant respectfully traverses and requests withdrawal of the rejection.

#### Claim 7

##### *The Office Action Fails to Indicate the Access Key in Eller '860*

Claim 7 refers to “the database system of claim 1, further comprising an access key for interchangeably enabling or disabling the system.” By way of example,

access to the crystal database **40** can be contingent upon database customer authentication through use of an access key **50**. The access key **50** can include information pertaining to the identity of the database customer, a particular site or computer licensed for use of the database, time limit or expiration date for use of the database, a limit to the number of times data can be accessed by a particular customer, or similar information pertaining to identification and rights. The access key **50** can be a software key **52**, a hardware key or dongle **58**, or the access key **50** can be a connection to a network **54** in order to obtain customer authentication or validation from an external computer or site **56**.

Specification at paragraph [0040]. The Office action points to col. 7, lines 31-39 of Eller '860 for this claim element and argues that the ‘valid/unexpired password’ is equivalent to the ‘access key.’ However, Eller '860 indicates that the ‘decryption key’ is equivalent to the ‘password.’ Eller '860, col. 4, line 34. The Office action has previously indicated that the ‘decryption key’ is the ‘key crystal’ of claim 1. If the ‘decryption key’ is the ‘key crystal’ of claim 1, it cannot also be the ‘access key’ of claim 7. The ‘access key’ is a distinct claim element. Accordingly, Applicant respectfully asserts that no prima facie case of anticipation has been made. For at least these reasons, claim 7 is patentable over Eller '860. Furthermore, claim 7 incorporates all of the limitations of claim 1 and is therefore patentable over Eller '860 for at least the reasons discussed *supra*. Accordingly, Applicant respectfully traverses and requests withdrawal of the rejection.

#### Claim 9

##### *The Office Action Fails to Indicate the Access Key in Eller '860*

Claim 9 refers to “database system of claim 7 wherein the access key is a software component.” The Office action as previously indicated that the ‘decryption key’ is the



‘key crystal’ of claim 1. If the ‘decryption key’ is the ‘key crystal’ of claim 1, it cannot also be the ‘access key’ of claims 7 and 9. The ‘access key’ is a distinct claim element. Accordingly, Applicant respectfully asserts that no prima facie case of anticipation has been made. For at least these reasons, claim 9 is patentable over Eller ’860. Furthermore, claim 9 incorporates all of the limitations of claims 1 and 7 and is therefore patentable over Eller ’860 for at least the reasons discussed *supra*. Accordingly, Applicant respectfully traverses and requests withdrawal of the rejection.

#### Claim 14

Claim 14 refers to “the database system of claim 1 wherein the one or more data crystals, the one or more iterators, and the one or more queries are deployed at an unsecured customer location.” The Office action alleges that ‘deployed at an unsecured customer location’ is read on ‘transmitted in unencrypted form to be displayed on client monitor’ (col. 7, lines 28-30; col. 8, lines 45-63). Applicant respectfully traverses.

Eller ’860 refers to the “music viewer software stor[ing] the partially encrypted digital score and [allowing] the first page of the score (which is transmitted in unencrypted form) to be displayed on the client monitor and played back.” Eller ’860, col. 8, lines 60-63. The unencrypted portion of the score (*e.g.*, the first page) is no longer secure and could be viewed without restriction. However, claim 1 and 14 refer to “whereby the one or more data crystals, one or more iterators, one or more queries, and key crystal regulate access to the one or more data records” (quoting claim 1) even when “the one or more data crystals, the one or more iterators, and the one or more queries are deployed at an unsecured customer location.” (quoting claim 14). Accordingly, Eller ’860 does not anticipate claim 14. For at least these reasons, claim 14 is patentable over Eller ’860. Furthermore, claim 14 incorporates all of the limitations of claim 1 and is therefore patentable over Eller ’860 for at least the reasons discussed *supra*. Accordingly, Applicant respectfully traverses and requests withdrawal of the rejection.

#### Claim 15

Claim 15 refers to “the database system of claim 1 wherein each iterator corresponds to only one of the one or more data crystals.” The Office action alleges that the ‘purchase a copy of the music in sheet music form’ and ‘single-use license’ in col. 6,

lines 12-25 of Eller '860 anticipate claim 15. In addition, the Office action alleges that 'iterator' is read on 'accessing program.' Applicant respectfully traverses.

If Eller '860 anticipated claim 15, a new 'accessing program' would be downloaded each time a new score is purchased. However, Eller '860 does not disclose such an embodiment, nor does it hint at one. For at least these reasons, claim 15 is patentable over Eller '860. Furthermore, claim 15 incorporates all of the limitations of claim 1 and is therefore patentable over Eller '860 for at least the reasons discussed *supra*. Accordingly, Applicant respectfully traverses and requests withdrawal of the rejection.

### Claim 16

Claim 16 refers to "the database system of claim 1 wherein a first query can call a second query to employ at least one of the one or more iterators." By way of example, Fig. 9 of the present application illustrates a first query (e.g., 34b) calling a second query (e.g., 34a) to employ at least one of the one or more iterators (e.g., 36a and 36b). The Office action alleges that the 'a first query' is read on 'using a search function,' and 'call a second query' is read on 'call a title' (col. 5, lines 45-49). Applicant respectfully traverses.

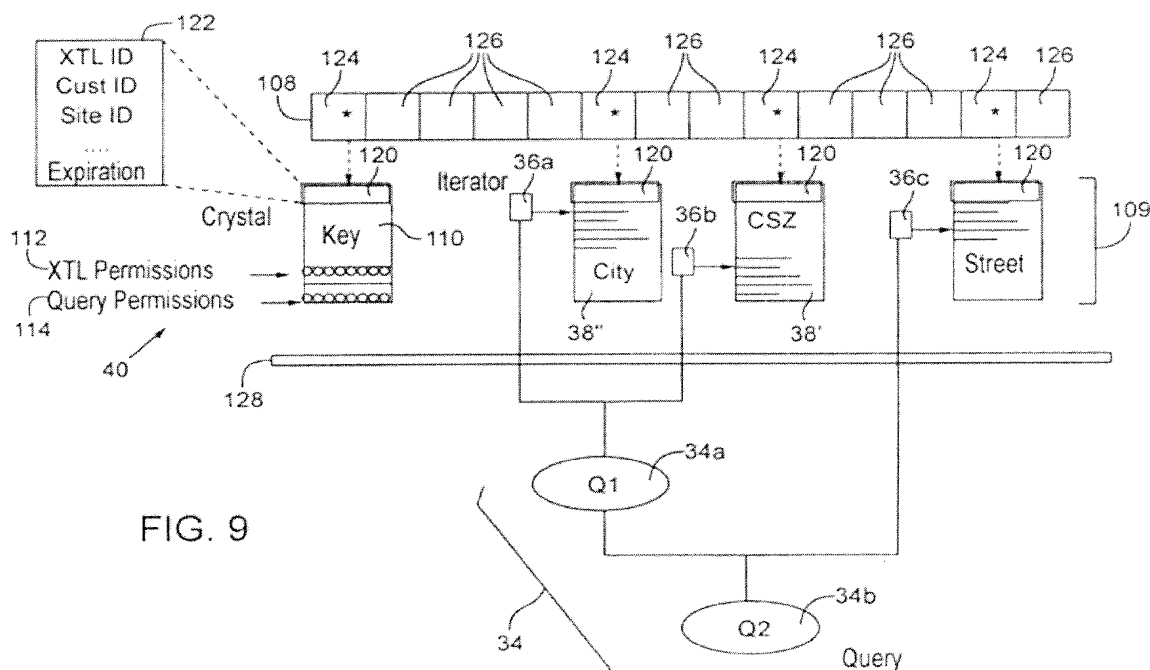


FIG. 9 of the Present Application

The Office action has previously indicated that ‘query’ is read on ‘request by a client’ to purchase a score. Essentially, the Office action is arguing that Eller ’860 discloses a first request by a client to purchase a score calling a second request by a client to purchase a score to employ at least one of the one or more accessing program. Applicant does not see where Eller ’860 discloses such an embodiment.

In addition, the portion of Eller ’860 cited by the Office action discusses “the client select[ing] a score to sample and [request] the music from the server . . . by scrolling through the library and clicking on a selected title, by using a search function to call a title, or by any other appropriate means.” This is not the same as “a first query [calling] a second query to employ at least one of the one or more iterators.” (quoting claim 16).

For at least these reasons, claim 16 is patentable over Eller ’860. Furthermore, claim 16 incorporates all of the limitations of claim 1 and is therefore patentable over Eller ’860 for at least the reasons discussed *supra*. Accordingly, Applicant respectfully traverses and requests withdrawal of the rejection.

#### Claim 17

Claim 17 refers to “at least one query of a predefined type: wherein one or more of the at least one query is called by an application with a data requirement; wherein the data requirement of the application determines the one or more called query; and wherein the one or more called query employs the iterator to access the at least one data record.” Simply put, Eller ’860 does not disclose the “at least one query” of claim 17 for several reasons. As discussed above with reference to claim 1, the “one or more queries” refers to a code segment or an executable set of instructions that has its own logic or intelligence.

#### *The Office Action Fails to Indicate a Query of a Predefined Type in Eller ’860*

First, claim 17 refers to “at least one query of a predefined type.” The Office action alleges that col. 2, lines 20-21 anticipate this claim element where ‘query’ is read on ‘request by a client.’ However, the Office action does not indicate where Eller ’860 indicates that the query is ‘of a predefined type.’ Accordingly, Applicant respectfully asserts that no prima facie case of anticipation has been made.

*The Office Action Fails to Indicate a Query Called by an Application in Eller '860*

In addition, claim 17 refers to “wherein one or more of the at least one query is called by an application with a data requirement.” The Office action does not indicate where Eller '860 indicates that the query is ‘called by an application.’ Accordingly, Applicant respectfully asserts that no prima facie case of anticipation has been made.

*Eller '860 Does Not Disclose a Query Called by an  
Application with a Data Requirement*

Further, claim 17 refers to “wherein one or more of the at least one query is called by an application with a data requirement.” The Office action alleges that ‘authorized type of data’ is read on ‘information for a specific client. (col. 2, lines 22-25 of Eller '860). Claim 17 does not reference an ‘authorized type of data.’ Accordingly, Applicant respectfully asserts that no prima facie case of anticipation has been made.

Even assuming the Office action meant to say the ‘data requirement’ is read on ‘information for a specific client,’ the claim element is not anticipated by Eller '860. Essentially, the Office action is arguing that the ‘request by a client’ in Eller '860 is called by an application with an ‘information for a specific client.’ However, in Eller '860, the ‘request by the client’ is to purchase a music file. The ‘request by the client’ to purchase a music file would be initiated by the client, not an application with the client’s own information (*e.g.*, personal or financial data or address information). Accordingly, Eller '860 does not anticipate the “wherein one or more of the at least one query is called by an application with a data requirement” portion of claim 17.

*Eller '860 Does Not Disclose a Data Requirement  
of an Application Determining a Called Query*

Claim 17 refers to “wherein the data requirement of the application determines the one or more called query.” The Office action alleges that col. 3, lines 11-14 and col. 5, lines 30-35 of Eller '860 anticipates this claim element by arguing that the ‘client can browse through selection prior to making a purchase decision.’ Applicant respectfully traverses.

First, as previously discussed, the Office action does not indicate where Eller '860 anticipates the ‘data requirement’ or ‘application’ element of claim 17. Accordingly, Applicant respectfully asserts that no prima facie case of anticipation has been made.

Next, even assuming the Office action meant to say the ‘data requirement’ is read on ‘information for a specific client,’ claim 17 is not anticipated by Eller ’860. The Office action essentially argues that the information for a specific client of the application determines the one or more called request by a client to purchase a score. If ‘query’ is read on a ‘request by a client’ to purchase a score, the ‘request by the client’ would be initiated by the client, not the application. The argument presented by the Office action does not track with the claim. Accordingly, Eller ’860 does not anticipate the “wherein the data requirement of the application determines the one or more called query” portion of claim 17.

*Eller ’860 Does Not Disclose a Query Employing an  
Iterator to Access At Least One Data Record*

Claim 17 refers to “wherein the one or more called query employs the iterator to access the at least one data record.” The Office action alleges that col. 3, lines 18-26 and col. 5, lines 38-42 of Eller ’860 anticipates this portion of claim 17 by arguing that the ‘access’ is read on ‘retrieving.’ Applicant respectfully traverses.

Col. 3, lines 18-26 of Eller ’860 reads “the method includes the steps of: receiving encrypted information and storing the information in memory in its encrypted form; receiving a decryption key and storing the key in memory separate from the encrypted information, for example, in a cache; identifying a request by a client to access the information; in response to the request, retrieving the encrypted information and key from memory and, thereafter, decrypting the information; and outputting the information for use by the client.” Col. 5, lines 38-42 of Eller ’860 reads “the system of the illustrated embodiment allows the client user to browse through the music library and view a selected portion, *e.g.*, the first page, of musical scores prior to consummating a transaction by purchasing a music copy or paying a license fee.”

The Office action essentially argues that the one or more called requests by a client to purchase a score employs the accessing program to access the at least one data record.” However, Eller ’860 indicates that “the Music Viewer software [*e.g.*, accessing program] monitors client messages until it receives (100) an ‘open file’ message indicating that the user desires to print, playback or otherwise use the music.” Eller ’860, col. 6, lines 47-50. Eller ’860 does not disclose a ‘request by a client’ to purchase a score employing the ‘accessing program.’ Accordingly, Eller ’860 does not anticipate the “wherein the one or

more called query employs the iterator to access the at least one data record” portion of claim 17.

*The Iterator of Claim 17 Cannot be the Access Program of Eller '860*

Claim 17 refers to “an iterator programmed to access the at least one data record according to the obfuscation technique.” The Office action alleges that col. 3, lines 18-26 of Eller '860 anticipates this portion of the claim by arguing that ‘access’ is read on ‘retrieving’ and ‘obfuscation technique’ is read on ‘decrypting.’ Applicant respectfully traverses.

The accessing program of Eller '860 (*e.g.*, the Music Viewer program) is used by “a client in accessing music files stored on the server.” Eller '860, col. 5, lines 4-6. As shown in Fig. 1 of Eller '860, the client “includes a central processing unit (CPU) 34, an internal cache 36 and/or external cache 38, memory 40 and input/output (I/O) hardware 42, all interconnected via data bus 44.” Eller '860, col. 4, lines 42-45. In operation, “the Music Viewer software monitors client messages until it receives (100) an ‘open file’ message indicating that the user desires to print, playback or otherwise use the music.” Eller '860, col. 6, lines 47-50. Accordingly, the user in Eller '860 appears to have direct access to the accessing program.

However, claim 17 refers to “wherein the one or more called query employs the iterator to access the at least one data record.” Access to the iterators is indirect – via the queries. “If a customer has direct access to the queries 34a and 34b, the data is still secure, but if the customer has direct access to the iterators 36a-36c, the data is not secure.” Specification at ¶ [0051]. Since the user in Eller '860 has direct access to the accessing program, the accessing program cannot be the iterators of claim 17. Accordingly, the accessing program of Eller '860 cannot anticipate the iterators of claim 17.

For at least these reasons, claim 17 is patentable over Eller '860. Accordingly, Applicant respectfully traverses and requests reconsideration and withdrawal of the rejection.

Claim 18

*The Office Action Fails to Indicate an Application in Eller '860*

Claim 18 refers to “the database system of claim 17 wherein the key crystal authorizes access to a specific data crystals out of the plurality of data crystals, wherein

the specific data crystal is authorized for the application.” The Office action does not indicate where Eller ’860 indicates ‘the application.’ Accordingly, Applicant respectfully asserts that no prima facie case of anticipation has been made. For at least these reasons, claim 18 is patentable over Eller ’860. Furthermore, claim 18 incorporates all of the limitations of claim 17 and is therefore patentable over Eller ’860 for at least the reasons discussed *supra*. Accordingly, Applicant respectfully traverses and requests reconsideration and withdrawal of the rejection.

#### Claim 19

##### *The Office Action Fails to Indicate an Application in Eller ’860*

Claim 19 refers to “the database system of claim 17 wherein the key crystal authorizes access to a specific query out of the at least one query, wherein the specific query is authorized for the application.” The Office action does not indicate where Eller ’860 indicates ‘the application.’ Accordingly, Applicant respectfully asserts that no prima facie case of anticipation has been made.

##### *Eller ’860 Does Not Teach the Query of Claim 19*

The Office action argues that col. 2, lines 48-51 and col. 3, lines 2-8 of Eller ’860 anticipate claim 19 by pointing to ‘transaction specific access authorization.’ Col. 2, lines 48-51 of Eller ’860 reads “according to another aspect of the present invention, a method and corresponding system is provided for enabling transaction-specific access authorization with respect to protected information.” Col. 3, lines 2-8 of Eller ’860 read “in particular, the associated method involves establishing a database of information at a network server, encrypting a portion of the information and receiving an access request. Upon receiving an access request, a selected portion of the information is transmitted in partially encrypted form and, thereafter, a decryption key is transmitted to the client.” This is not the same as “the database system of claim 17 wherein the key crystal authorizes access to a specific query out of the at least one query, wherein the specific query is authorized for the application.”

For at least these reasons, claim 19 is patentable over Eller ’860. Furthermore, claim 19 incorporates all of the limitations of claim 17 and is therefore patentable over

Eller '860 for at least the reasons discussed *supra*. Accordingly, Applicant respectfully traverses and requests reconsideration and withdrawal of the rejection.

#### Claim 20

Claim 20 refers to “the database system of claim 17 wherein a first query can call a second query to employ the iterator.” By way of example, Fig. 9 of the present application illustrates a first query (*e.g.*, 34b) calling a second query (*e.g.*, 34a) to employ at least one of the one or more iterators (*e.g.*, 36a and 36b). The Office action alleges that the ‘a first query’ is read on ‘using a search function,’ and ‘call a second query’ is read on ‘call a title’ (col. 5, lines 45-49). Applicant respectfully traverses.

The Office action essentially argues that a first request by a client to purchase a score can call a second request by a client to purchase a score to employ the iterator. Applicant does not see where Eller '860 discloses such an embodiment.

In addition, the portion of Eller '860 cited by the Office action discusses “the client select[ing] a score to sample and [request] the music from the server . . . by scrolling through the library and clicking on a selected title, by using a search function to call a title, or by any other appropriate means.” This is not the same as “a first query [calling] a second query to employ the iterator.” (quoting claim 20).

For at least these reasons, claim 20 is patentable over Eller '860. Furthermore, claim 20 incorporates all of the limitations of claim 17 and is therefore patentable over Eller '860 for at least the reasons discussed *supra*. Accordingly, Applicant respectfully traverses and requests reconsideration and withdrawal of the rejection.

#### Claim 21

##### *The Office Action Fails to Indicate a Preauthorized Type of Data Requirement in Eller '860*

Claim 21 refers to “providing a query to request the iterator to locate and access the data record only in accordance with a preauthorized type of data requirement.” The Office action alleges that col. 3, lines 11-14 anticipate this claim element without supporting argument. Col. 3, lines 11-14 of Eller '860 states that “the client can thereby browse through a selection of scores prior to making a purchasing decision, authorizing payment and, in response, receiving a decryption key.” This is not the same as “only in



accordance with a preauthorized type of data requirement.” In addition, the Office action does not specify where Eller ’860 indicates that the data requirement is a ‘preauthorized type.’ Accordingly, Applicant respectfully asserts that no prima facie case of anticipation has been made.

*Eller ’860 Does Not Disclose a Query Requesting an  
Iterator to Locate and Access a Data Record*

*Only in Accordance with a Preauthorized Type of Data Requirement*

Claim 21 refers to “providing a query to request the iterator to locate and access the data record only in accordance with a preauthorized type of data requirement.” The Office action alleges that col. 3, lines 2-11 of Eller ’860 anticipates “a query to request the iterator to locate and access the data record.” Applicant respectfully traverses.

Col. 3, lines 2-11 of Eller ’860 reads “in particular, the associated method involves establishing a database of information at a network server, encrypting a portion of the information and receiving an access request. Upon receiving an access request, a selected portion of the information is transmitted in partially encrypted form and, thereafter, a decryption key is transmitted to the client. By way of example, the partially encrypted information can be sheet music where only the first page of a score is unencrypted for viewing.”

The Office action essentially argues that a request by a client to purchase a score to request the accessing program to locate and access the data record only in accordance with a preauthorized type of data requirement. However, Eller ’860 indicates that “the Music Viewer software [e.g., accessing program] monitors client messages until it receives (100) an ‘open file’ message indicating that the user desires to print, playback or otherwise use the music.” Eller ’860, col. 6, lines 47-50. Eller ’860 does not disclose a ‘request by a client’ to purchase a score requesting the ‘accessing program’ to locate and access the data record. Furthermore, Eller ’860 does not disclose this being done “only in accordance with a preauthorized type of data requirement” (quoting claim 21). Accordingly, Eller ’860 does not anticipate the “providing a query to request the iterator to locate and access the data record only in accordance with a preauthorized type of data requirement” portion of claim 21.

*Eller '860 Does Not Teach a Key Crystal Authorizing Use of the Data Crystal and the Query According to the Preauthorized Type of Data Requirement*

Claim 21 refers to “providing a key crystal authorizing use of the data crystal and the query according to the preauthorized type of data requirement.” The Office action argues that col. 7, lines 31-39 of Eller '860 anticipate claim 21 by arguing that ‘preauthorized’ is read on ‘music is decrypted and displayed if the password is valid or unexpired.’ Col. 7, lines 31-39 of Eller '860 reads “however, in the case where the music is encrypted with the exception of the first page for sampling, the Music Viewer proceeds to display (120) the first page and disable printing or MIDI extraction. If the client user then attempts to display the remainder of the music, the Music Viewer first determines (122) whether a valid and unexpired password has been assigned to the user. If so, the music is decrypted and displayed (124). Otherwise, an error message is displayed (126).” This is not the same as “providing a key crystal authorizing use of the data crystal and the query according to the preauthorized type of data requirement.”

The Office action essentially argues that Eller '860 discloses a key crystal authorizing use of the data crystal and the request by a client to purchase a score according to the preauthorized type of data requirement. However, Applicant does not see where Eller '860 discloses such an embodiment. Accordingly, Eller '860 does not anticipate the “providing a key crystal authorizing use of the data crystal and the query according to the preauthorized type of data requirement” portion of claim 21.

*The Iterator of Claim 21 Cannot be the Access Program of Eller '860*

Claim 21 refers to “providing an iterator to access and deobfuscate the obfuscated data record.” The Office action alleges that col. 3, lines 18-26 and col. 4, lines 46-49 of Eller '860 anticipates this portion of the claim by arguing that ‘deobfuscate’ is read on ‘decrypting’ and ‘iterator’ is read on ‘accessing program.’ Applicant respectfully traverses.

The accessing program of Eller '860 (e.g., the Music Viewer program) is used by “a client in accessing music files stored on the server.” Eller '860, col. 5, lines 4-6. As shown in Fig. 1 of Eller '860, the client “includes a central processing unit (CPU) 34, an internal cache 36 and/or external cache 38, memory 40 and input/output (I/O) hardware 42, all interconnected via data bus 44.” Eller '860, col. 4, lines 42-45. In operation, “the Music Viewer software monitors client messages until it receives (100) an

‘open file’ message indicating that the user desires to print, playback or otherwise use the music.” Eller ’860, col. 6, lines 47-50. Accordingly, the user in Eller ’860 appears to have direct access to the accessing program.

However, claim 21 refers to “providing a query to request the iterator to locate and access the data record only in accordance with a preauthorized type of data requirement.” Access to the iterator is indirect – via the query. “If a customer has direct access to the queries 34a and 34b, the data is still secure, but if the customer has direct access to the iterators 36a-36c, the data is not secure.” Specification at ¶ [0051]. Since the user in Eller ’860 has direct access to the accessing program, the accessing program cannot be the iterator of claim 21. Accordingly, the accessing program of Eller ’860 cannot anticipate the iterator of claim 21.

For at least these reasons, claim 21 is patentable over Eller ’860. Accordingly, Applicant respectfully traverses and requests reconsideration and withdrawal of the rejection.

#### ***Claim Rejections – 35 U.S.C. §103***

The Office action rejects claim 8 as allegedly being unpatentable over Eller ’860 in view of U.S. Patent No. 6,314,409 (Schneck ’409) under 35 U.S.C. § 103(a). This rejection is not well-founded because Schneck ’409 does not remedy the deficiency of Eller ’860 with respect to claims 1 and 7 discussed *supra*. Therefore, claim 8 remains patentable over Eller ’860 even when combined with Schneck ’409. Accordingly, Applicant respectfully traverses and requests reconsideration and withdrawal of the rejection.

#### ***New Claims 22-30***

New claims 22-30 are submitted to more completely claim the invention. For example, independent claim 22 refers to “predefined query” and “iterator” which have been discussed in detail throughout this response. Accordingly, claims 22-30 are believed to be patentable over the art of record for at least the reasons discussed *supra*.

***Conclusion***

In view of the foregoing, Applicant submits that all claims are in condition for allowance. Therefore, entry of the offered amendments and early issuance of the Notice of Allowance is respectfully requested. The Examiner is welcome to call the undersigned to discuss any aspect of this application.

The Commissioner is hereby authorized to charge shortages or credit overpayments to Deposit Account No. 19-4455.

Respectfully submitted,

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By



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